IJCNP, Volume 3, Issue 10, 2025 ISSN: 2995-536X
https://medicaljournals.eu/index.php/IJCNP

INTERNATIONAL JOURNAL OF COGNITIVE NEUROSCIENCE AND PSYCHOLOGY

AGE-RELATED TYPOLOGICAL AND MORPHOLOGICAL CHANGES OF THE STOMACH

Xudoyberdiev Dilshod Karimovich
Bukhara State Medical Institute Named After Abu Ali Ibn Sino

Relevance of the study. Diseases of the digestive tract occupy one of the leading places in medical statistics and are one of the most common diseases of internal organs. The causes of their occurrence are malnutrition, poor environmental conditions, a sedentary lifestyle and pollution of the water supply. The bacterium Helicobacter pylori plays an important role in diseases of the digestive system. Pylori, as well as many stresses in human life, lead to deep depression and, as a result, damage to the gastrointestinal tract (GIT). The digestive tract is essentially a tube of various shapes, sizes, collecting apparatus and functions. Each section of the digestive tract can be subject to tumor damage, inflammatory changes of infectious and autoimmune origin, occurring in acute and chronic forms. But if we talk about the study of the digestive system, the hepatobiliary zone (liver, gallbladder, intrahepatic and extrahepatic bile ducts, pancreas) cannot be excluded from the examination algorithm, as this significantly worsens the examination. A large number of articles and monographs are devoted to the section on radiology of the digestive tract. A number of domestic authors (VBAntonovich, ANKishkovsky, LATyutin, NUShniger, LMPortnoy) made an invaluable contribution to the development of this complex diagnostic direction of creation and modernization, redefinition of X-ray methods for studying the gastrointestinal tract.

The purpose of the study. to study age-related typological and morphological changes in the stomach.

Results and analysis. The digestive tract is a soft tissue structure that is permeable to X-rays, so the study is carried out by introducing a suspension of barium sulfate (BaSO4) into it. Barium sulfate is a positive radiopaque substance for examining the digestive tract, insoluble in water, used in the form of a suspension. The density of the suspension depends on the type of study. The size of barium particles is 0.6 -1.4 μm. A typical barium enema requires a low-density suspension (0.1-0.2 g / ml). When double-contrasting the stomach, medium (0.8 -1.0 g / ml) or high-density (2.0-2.5 g / ml) suspensions are used. When examining patients in the postoperative period, barium sulfate is not used (only water-soluble preparations are used). In the process of studying various parts of the digestive tract with contrast, the following contrast phases are distinguished: solid filling, mucosal emptying, double contrast (barium / gas), primary double contrast. Clinical symptoms of diseases of the digestive system are non-specific (nausea, flatulence, feeling of heaviness and pain in the epigastrium, palpitations, stool disorders, loss of appetite, etc.) and sometimes very similar to myocardial infarction and dissection abdominal aorta, which significantly complicates the recognition of the patient's real problems and requires routine or urgent radiation examination. Therefore, it is very important to know the clinical picture of diseases of the digestive system and master the algorithm for examining this group of patients. To optimize the process of identifying many diseases of the digestive tract, a syndromic approach to X-ray diagnostics has been created, which includes 6 conditional syndromes of diseases of the gastrointestinal tract. Syndromes of diseases of the gastrointestinal tract: 1. Syndrome of diffuse organ enlargement. 2. Syndrome of limited organ enlargement. 3. Syndrome of diffuse organ narrowing. 4. Syndrome of limited organ narrowing. 5. Syndrome of pathological changes in the relief of the mucous membrane. 6. Syndrome of organ dislocation.

The introduction of a contrast medium into the lumen of the gastrointestinal tract allows you to assess the localization of the organ, its contours, diameter and the state of the folding apparatus, which usually allows you to recognize the pathological process. The alternation of contrasting phases differs

at different levels of the digestive tract. Visualization of the intact organ, that is, the pharynx and esophagus, is necessary to identify processes such as diverticula, strictures, tumors and hernias.

The main method of instrumental diagnosis of gastric diseases is X-ray examination. X-ray examination is necessary in patients over 45 years of age with gastroduodenal dyspepsia or with persistent epigastric pain, weight loss, vomiting, peptic ulcer or previous gastric surgery.

In the arsenal of diagnostics of chronic gastroduodenitis associated with Helicobacter pylori, the doctor has wide opportunities. It is worth noting that the results obtained from many research methods also differ depending on the type of constitution. Indeed, currently pediatrics, like other sciences, adheres to the trends in which the assessment of the development of a child's health is carried out taking into account his individual characteristics. Thus, the role of the constitutional aspect in the formation and course of diseases of the upper digestive tract, in particular chronic gastroduodenitis, seems to be important. The doctrine of the constitution. Taking into account the constitutional features of the body within the framework of the anthropological approach is an integral component in the study of the state of human health. Such an approach to the study of the macroorganism allows us to gain a more complete understanding of the diversity of forms and factors of variability of systems, as well as to identify patterns between the specific somatic constitution (somatotype) of a person and his other systems, in particular, digestion. The idea of the tropism of a certain spectrum of diseases to a certain constitutional type, registered according to physical characteristics, belongs to the German constitutional school. The first steps in this direction in the domestic school were first introduced by MV Chernorutsky, the American anthropologist Bryant , on the basis of which he proposed to classify human body types, consisting of three components: asthenic hyposthenic, normosthenic and hypersthenic. He also identified and formulated the main features of a certain type. Thus, the hyposthenic (asthenic) type is characterized by a low position of the diaphragm and a small heart with an elongated droplet shape. Elongated lungs, a relatively short intestine with reduced absorption capacity. Blood pressure decreases, the amount of cholesterol in the blood decreases. Metabolism increases slightly, dissimilation processes are strong. The hypersthenic type also has other features: a high diaphragm, a large stomach and a long intestine with high absorption capacity. The heart is relatively large and located more horizontally. There is a tendency to increase blood pressure. There is an increase in cholesterol and uric acid in the blood, an increase in the number of red blood cells. Assimilation processes and a tendency to obesity prevail. Normostenic - a moderately well-nourished, proportionally developed type. Individual anatomical variability determines the ability to respond to various environmental stimuli. It should be noted that vital parameters at different levels have constitutional conditionality. This is confirmed by a sufficient number of facts collected in modern literature. The human constitution is formed at an early stage of ontogenesis. It is during these periods that a predisposition to a particular pathology is formed. Most diseases in adults and children occur against the background of one or another predisposition. However, this predisposition does not always turn into a true multifactorial disease, since in young children, due to age-related physiological characteristics, the threshold values of the influence of external factors are reduced. With the growth and maturation of immunity, the influence of external factors on the body may increase, while hereditary factors may weaken. Under favorable environmental conditions, the predisposition to the disease may not be realized at all. The manifestation of the predisposition depends not only on unfavorable external environmental factors, but also on the duration and strength of their influence. For example, the incidence of diseases in adolescence. Thus, at this age the frequency of many chronic diseases increases. The idea of the tropism of a certain spectrum of diseases for a certain constitutional type, registered according to the characteristics of the body, belongs to the German constitutional school (Rees L. et. al., 1945). " The concepts of "constitution " and "chronic diseases of internal organs" reveal taxonomic commonality in terms of genetic determination. These complex phenotypic signs are polygenic, multifactorial in nature. Phenotypic manifestations are associated not only with the coordinating interaction of a large number of genes and their primary products at the molecular biochemical level, but also with the morphological regulatory mechanisms of a higher level of organization. The formation of such phenotypic fundamental processes of life as metabolism,

reproduction, immunity, information processing, adaptation to changing environmental conditions occurs under the influence of genetic and environmental factors. The influence of environmental factors on the physical development of children and adolescents is well known. All their diversity can be divided into 3 groups: biogeographic, socio-economic and ecological. However, it should be understood that modern constitutional science is no longer focused on studying the frequency of occurrence of individual constitutional types in various diseases, but aimed at studying the causes, mechanisms, clinical differences and variants of pathological processes in groups. differ in their constitutional features. Based on the above, it can be noted that asthenics are more susceptible to diseases of the gastrointestinal tract and have a higher risk of developing gastric and duodenal ulcers and vegetative-vascular diseases than others. vascular dystonia. Another famous Russian clinician Vasilenko V.X. believed that "Patients are predisposed to peptic ulcers from birth due to their asthenic constitution." Among hypersthenics, according to the observations of M.V. Chernorutsky, people with diabetes and gallbladder diseases are more likely to have hyposthenia, disorders of the autonomic nervous system can be noted.

Characteristics and the body's reactivity, metabolism, endocrine immunological indicators and temperamental characteristics proves that the somatotype can be the basis not only for constitutional diagnostics and assessment of human health. Here, somatology intersects with ideas about homeostasis as the main property of life in order to maintain stable existence in a changing environment. The study of homeostatic mechanisms is carried out at different levels of organization of biosystems, from cells to the whole organism, under normal conditions and in adaptation to changes in the external environment. It is difficult to overestimate the role of the human constitutional doctrine in the problem of assessing its health. Health is a holistic multidimensional state of the body (including positive and negative indicators), which allows a person to perform biological and social functions to varying degrees in the process of realizing genetic potential in a given social and ecological environment.

Conclusion. This is modern anthropology, which has a unique ability to quantitatively assess the physical condition of the human body at different periods of its ontogenetic cycle, at any level of the study of morphology, from subcellular to organismal, has the ability to give not only individual, but also typological characteristics. (bringing it to the population level), is the basis for scientific work in various areas related to human health issues. However, the constitutional norm of the reaction determined by a particular somatotype does not change the essence of the disease with its specific clinical symptoms, development patterns and outcomes, but it allows us to identify constitutionally related signs of the disease. GIving an individual expression to the pathological process.

REFERENCES USED

1. Balko OA, Sapozhnikov VG On methods for diagnosing chronic gastroduodenitis associated with Helicobacter pylori, depending on the type of constitution in children (literature review) // Bulletin of New Medical Technologies. 2019. No. 2. pp. 5–11. DOI: 10.24411/1609-2163-2019-16340.
2. Balko OA, Sapozhnikov VG Etiology, pathogenesis, course and treatment features of chronic gastroduodenitis in children depending on the type of constitution (literature review) // Bulletin of New Medical Technologies. Electronic edition. 2018. Issue 6. Issues 1-7. URL: http://www.medtsu.tula.ru/VNMT/Bulletin/E2018-6/1-7.pdf (accessed 10/12/2018). DOI: 10.24411 / 2075-4094-2018-16265 / Balko OA, Sapozhnikov VG. Features of etiology, pathogenesis, technology and treatment of chronic gastroduodenitis in children depending on the type of constitution (review) Etiology, pathogenesis, current and chronic treatment features of gastroduodenitis in children depending on the somatotype (literature review). Bulletin of New Medical Technologies. Electronic edition [Internet]. 2018 [cited December 10, 2018]; 6 [approx. 6 pages]. Russian. Available: http://www.medtsu.tula.ru/VNMT/Bulletin/E2018-6/1-7.pdf. DOI: 10.24411/2075-4094-2018-16265.
3. Dombayan SX, Panova IV Features of changes in the level of neuron - specific enolases in children of I-II health groups depending on physical development and gender // Postgraduate doctor. 2016. Issue 2.2. WITH . 273–278 / Dombayan SKh , Panova IV. Features of changes in the level of

neuron-specific enolases in children of I-II health groups depending on physical development and gender [Features of changes in the level of neuron-specific enolases in children of III health groups depending on physical development and gender]. Doctor-postgraduate. 2016;2.2 :273-8. rus.

4. and prospects of modern pediatric gastroenterology // Pediatrics. Journal named after GN Speransky. 2016. Issue 6 (95). Pages 10–18 / Zaprudnov AM, Grigor'ev KI, Kharitonova LA. Problematic and perspective of modern pediatric gastroenterology [Problems and prospects of modern pediatric gastroenterology]. Pediatrics. Journal named after GN Speranskogo. 2016 ;6 (95):10-8. rus.
5. Koroleva IM Radiation technologies in gastroenterology: "old" and "new" in diagnostics // Consilium Medicum. 2017. Issue 8. URL: https://cyberleninka.ru/article/n/luchevye-tehnologii-v-gastroenterologii-staroe-i-novoe-v-diagnostike (access date: 09/24/2023).
6. Bondarenko AA, Cherednikov EE, Popov Art.V. Modern views on the diagnosis, treatment and prevention of rupture hemorrhagic syndrome (Mallory-Weiss syndrome) // Bulletin of new medical technologies. 2016. Issue 4. pp. 161–172 / Cherednikov EF, Maleev YuV, Chernykh AV, Litovkina TE, Bondarenko AA, Cherednikov EE, Popov ArtV . Modern views on the diagnosis, treatment and prevention of rupture-hemorrhagic syndrome (Mallory-Weiss symptom) [Modern views on the diagnosis, treatment and prevention of rupture-hemorrhagic syndrome (Mallory-Weiss syndrome)]. Vestnik novyh meditsinskikh tehnologii . 2016 ;4:161 -72. rus.
7. Shishko VI, Petrulevich Yu.Ya. Gastroesophageal reflux disease: anatomical and physiological features of the esophagus, risk factors and mechanisms of development (literature review, part 1) // Journal of GrSMU. 2015. Issue 1 (49). WITH . 19-25 / Shishko VI, Petrulevich YuYa . Gastroesophageal reflux disease: anatomical and physiological features of the esophagus, risk factors and mechanisms of development (review of literature , part 1) [Gastroesophageal reflux disease: anatomical and physiological features of the esophagus, risk factors and mechanisms of development (review of literature, part 1)]. Journal GrGMU . 2015;1(49):19-25. rus.
8. McCracken KW, Wells JM. Mechanisms of embryonic stomach development. Semin Cell Dev Biol 2017; 66:36–42
9. Farrell MB. Gastric emptying scintigraphy. J Nucl Med Technol 2019;47(2):111–119